

Application No.: 10/569,222  
Response dated: March 3, 2009  
Response to Office Action mailed December 3, 2008

### REMARKS/ARGUMENTS

This is responsive to the Office Action dated December 3, 2008. A response is due by March 3, 2009, with out an extension of the time for responding to the Office Action.

Claims 15-22 and 24-32 are now pending in this application.

Claims 15-32 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Annemaier et al. (US Patent No. 5,496,881), Ikeguchi et al. (US Patent No. 6,528,552), Ebrahimian et al. (US Patent No. 7,078,452), or Kawaguchi et al. (US Patent Publication No. US 2004/0126574) in view of Cusack et al. (US Patent No. 6,150,447).

Claims 15, 17-22, 24-26, 28, 29, and 32 were further rejected under 35 U.S.C. § 102 (b or e) as being anticipated by Annemaier, Ikeguchi, Ebrahimian, or Kawaguchi.

The Examiner has presented the obviousness rejections first and the novelty rejections second, but the Applicant will present the response by dealing with the novelty issues first and the obviousness issues second.

The present invention is directed to a halogen-free fire retardant coating composition which includes a film forming polymer and an inorganic fire retardant material which is a combination of fire resistant filler particles and a metal stannate, metal hydroxyl stannate, or combination thereof, where the overall pigment volume concentration or PVC of the composition is from 75 to 97% and where the composition has a medium shear viscosity measured at 25°C of from 0.6 Pa.s to 6.0 Pa.s.

Annemaier is directed to an aqueous composition for forming fire-proof coatings and caulking. These coating and caulks are different from Applicants paints, lacquers and varnishes, as expressed by the medium shear viscosity. The Examiner has noted that Annemaier disclose an aqueous thickener solution comprising 25% vinyl acetate homopolymer, 15% aluminum hydroxide, 10% magnesium hydroxide, 3.5% zinc hydroxystannate, 13.5% talc, and 9% kaolin in Example 3 and coatings in claims 32 and 33. But, Annemaier does not teach Applicant's claimed pigment volume concentration (PVC) of 75 to 97%. At best, Annemaier teaches in column 3, lines 41-45, that the flameproofing agent is present in a quantity of 10 to 60% by weight. Therefore, Annemaier cannot anticipate the presently claimed invention. Therefore, reconsideration and withdrawal of the § 102 rejection is respectfully requested.

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Ikeguchi teaches a resist composition for a permanent protective coating of a printed wiring board. The Examiner notes that Ikeguchi teach a protective coating comprising 100-140 parts by weight of aluminum hydroxide, 0.1-15 parts by weight of a molybdenum compound, 0.1-10 parts by weight of a zinc stannate or hydroxystannate, and 100 parts of resin in claim 1. The Ikeguchi composition contains between 100.2 and 165 parts of flame retardant and 100 parts by weight of a resin and the high end would be only 62 weight % of flame retardant. Applicants claimed range is not anticipated by Ikeguchi. Therefore, reconsideration and withdrawal of the § 102 rejection is respectfully requested.

Ebrahimian is directed to a zero halogen polyolefin composition which is useful for coating wires and conductors. Coatings for wires and conductors are different from Applicants paints, lacquers and varnishes, as expressed by the medium shear viscosity. Ebrahimian, the Examiner notes, recite 178.7 phr magnesium hydroxide and 4.8 phr zinc stannate in Table 2, Formulas 1 and 2. But, Ebrahimian is not a coating composition and does not employ a film forming polymer. It is a composition that needs to be applied by, for example, extrusion. Thus, Ebrahimian would not anticipate the presently claimed invention. Therefore, reconsideration and withdrawal of the § 102 rejection is respectfully requested.

Kawaguchi is directed to a flame retardant pressure-sensitive adhesive tape, which is not a coating composition. The Examiner notes that Kawaguchi display a rubber coating containing magnesium hydroxide and zinc stannate in Examples 1-3. But the amount of magnesium hydroxide and zinc stannate in Examples 1-3 is less than about 60 percent by weight. Note in Kawaguchi on page 7, paragraphs [0083] to [0086]. Again, this is not a coating composition and the PVC does not anticipate Applicant's claimed range. Therefore, reconsideration and withdrawal of the § 102 rejection is respectfully requested.

Cusack is directed to fire-retardant material which is a particulate inorganic filler coated with a layer of divalent metal hydroxystannate or divalent metal stannate. The Examiner notes that Cusack reveal that when inorganic fillers are coated with a tin compound, the flame retardance of the filler increases in column 1, lines 38-42. Also noted is that aluminum hydroxide and magnesium hydroxide can be coated with sodium or potassium hydrostannate in column 1, lines 49-57. In column 2, lines 8-17, it is noted that in a polymer material, the coated fire-retardant filler can be present in a concentration of 5-400% by weight based on the weight of the polymeric

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material. Other than suggesting that the particles of Cusak can be used as flame retardant particles, there are no specific uses suggested and certainly no teachings to use them in a way that the PVC of the composition would be in the range claimed by Applicants. Further, the disclosure of Cusak would not cure any of the deficiencies of Annemaier, Ikeguchi, Ebrahimian, or Kawaguchi. Therefore, the presently claimed invention would not be obvious from any combination of these references. So, reconsideration and withdrawal of the § 103 rejection is respectfully requested.

In view of the above arguments, reconsideration and withdrawal of the rejections and allowance of claims 15-22 and 24-32 are respectfully requested.

Should the Examiner wish to discuss any of the foregoing in more detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



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